

REMARKS

Claims 3-11 are pending in the instant application. Claims 3-11 have been rejected under 35 USC §§ 112 and 103. However, applicants have amended claim 3 in order to meet the formal requirements of 35 USC §112, and respectfully request the rejection be withdrawn. These amendments to the claim are supported in the specification at page 1, lines 41-46.

In response to the rejection under 35 USC §103 in view of Shinosaki (JP 07-025946) and Noristi (US 5,244,854), applicants offer the following remarks. The examiner argues that the most recent amendment to the claims does not render the instant claims novel because the Board found “that Noristi discloses and suggests each of the limitation for the preparation of the catalyst component.” (Paper number 22, page 4). However, this argument appears to ignore pages 7-8 of the Board’s opinion which specifically discusses the interpretation of claim 3 as including a product-by-process limitation. Specifically, the Board states, “The patentability of a product claimed in a product-by-process claim is determined based on the product itself, not on the method of making it. (Pages 7-8 of Board decision, citing In re Thorpe 227 USPQ 964, 966 (Fed. Cir. 1985)).

Since applicants have amended the claims to eliminate the product-by-process elements, the claims should be interpreted in a different scope for purposes of examination, i.e. the scope of a process claim. In view of this interpretation of the claims Shinosaki and Noristi do not render the claims obvious. The references do not

support a *prima facie* case of obviousness because they do not suggest each and every limitation of the instant claims. Three requirements must be fulfilled in order for a *prima facie* case of obviousness to be satisfied. First, there must be some suggestion or motivation in the references themselves or available to one of ordinary skill in the art to modify the reference or to combine reference teachings.¹ Second, there must be a reasonable expectation of success. Third, the prior art references combined must teach or suggest all the claim limitations. MPEP §2143.

The Shinosaki and Noristi references do not suggest at least two of the limitations in the claims of the instant application. First, Shinosaki does not suggest the use of a chlorine free alkyl compound as a starting material. Working Example 1 of Shinosaki describes the formulation of solid titanium catalyst component as containing a mixture of anhydrous magnesium chloride. (Page 74, para. [0174]). This clearly does not meet the limitation of applicants claim 3 which requires chlorine-free magnesium alkyl compound.

Moreover, only example 9 of Noristi utilizes a chlorine free Mg compound however, the alcohol is reacted beforehand with the Mg compound in order to prepare an alkoxy derivative which is then supported on silica. Claim 3 of the applicants invention requires that the alcohol is reacted with the Mg chlorine free alkyl compound already supported in silica. As discussed above, the interpretation of the claims is

¹There are three possible sources for motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art. *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-1458 (Fed. Cir. 1998).

different in view of the elimination of the product-by-process language of claim 3.

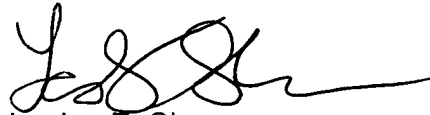
Accordingly, the claims should be examined in order to determine if each process limitation is obvious. In view of this change in the interpretation of the claims, the cited references cannot render the instant invention obvious as every limitation of the instant claims cannot be found in the references cited.

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Respectfully submitted,

KEIL & WEINKAUF

A handwritten signature in black ink, appearing to read 'Lesley E. Shaw', with a long horizontal flourish extending to the right.

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COMPLETE LISTING OF ALL CLAIMS IN THE APPLICATION

1. (canceled)
2. (canceled)
3. (currently amended) A process for the preparation of propylene homopolymers by polymerizing propylene at from 20 to 50°C and from 1 to 100 bar in the presence of a Ziegler-Natta catalyst system ~~containing, as active components,~~ wherein the process comprises
 - a) reacting a titanium halide with a chlorine-free magnesium alkyl compound, an inorganic oxide as a carrier, a C₁-C₈-alkanol and an electron donor compound by a method in which, in a first stage, a solution of the chlorine-free magnesium alkyl compound in an inert solvent is added to the inorganic oxide as a carrier, this mixture is allowed to react for from 0.5 to 5 hours at from 10 to 120°C and then reacted, at from -20° to 80°C with constant mixing, with a C₁-C₈-alkanol in at least a 1.3 fold molar excess, based on the compound of magnesium, to give a chlorine-free intermediate, the titanium halide and the electron donor compound are then added to said intermediate, the resulting mixture is allowed to react for at least 10 minutes at from 10 to 150°C and the solid substance thus obtained is then filtered off and washed in a liquid alkane and, reacting as cocatalyst,
 - b) an aluminum compound and

- c) a further electron donor compound,
the molar ratio of the aluminum compound b) to the further electron donor compound c) in the polymerization being from 1.5:1 to 9:1.
4. (original) A process for the preparation of propylene homopolymers as claimed in claim 3, wherein the molar ratio of the aluminum compound b) to the further electron donor compound c) is from 2:1 to 8:1.
5. (original) A process for the preparation of propylene homopolymers as claimed in claim 3, wherein ethanol is used as a C₁-C₈-alkanol in the preparation of the titanium-containing solid component a) in the first stage.
6. (original) A process for the preparation of propylene homopolymers as claimed in claim 3, wherein a di-C₁-C₁₀-alkylmagnesium is used as the chlorine-free compound of magnesium in the preparation of the titanium-containing solid component a).
7. (original) A process for the preparation of propylene homopolymers as claimed in claim 3, wherein an inorganic oxide which has a pH of from 1 to 6.5, a mean particle diameter of from 5 to 200 µm and cavities or channels having a mean particle diameter of from 1 to 20 µm and whose macroscopic volume fraction, based on the total particle, is from 5 to 30% is used as a carrier in the preparation of the titanium-containing solid component a).
8. (original) A process for the preparation of propylene homopolymers as claimed in claim 3, wherein silica gel is used as the inorganic oxide in the preparation of the

titanium-containing solid component a).

9. (original) A process for the preparation of propylene homopolymers as claimed in claim 3, wherein silica gel is used as the inorganic oxide in the preparation of the titanium-containing solid component a).

10. (original) A process for the preparation of propylene homopolymers as claimed in claim 3, wherein a trialkylaluminum compound whose alkyl groups are each of 1 to 8 carbon atoms is used as the aluminum compound b).

11. (original) A process for the preparation of propylene homopolymers as claimed in claim 3, wherein at least one organosilicon compound of formula (I)



where the radicals R^1 are identical or different as are each C_1 - C_{20} -alkyl, 5- to 7-membered cycloalkyl, which in turn may be substituted by C_1 - C_{10} -alkyl, or are C_6 - C_{28} -aryl or C_6 - C_{18} -aryl- C_1 - C_{10} -alkyl, the radicals R^2 are identical or different and are each C_1 - C_{20} -alkyl and n is 1, 2, or 3, is used as further electron donor compound c).

12. (canceled)

13. (canceled)

14. (canceled)